

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

#14
K Cooper
1-28-03

In re Application of

David William BALSDON

Application No.: 09/592,907

Filed: 13 June 2000

For: CANISTER PURGE VALVE FOR HIGH
REGENERATION AIR FLOW



Confirmation No.: 5487

Group Art Unit: 3753

Examiner: J. Fox

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Commissioner for Patents
Washington, D.C. 20231

Sir:

REQUEST FOR RECONSIDERATION UNDER 37 C.F.R. § 1.116

In response to the final Office Action dated 21 October 2002 (Paper no. 15), the period for reply to which extends to 21 January 2003, please reconsider the application in view of the following remarks. Claims 7-16 and 21-24 are currently pending in the application, and are respectfully submitted for reconsideration by the Examiner.

Claims 21-24 and 11-13 were rejected under 35 U.S.C. § 103 as being unpatentable over U.S. Patent No. 5,649,687 to Rosas et al. (Rosas) in view of U.S. Patent No. 4,362,185 to Kadner. And claims 7-10 and 14-16 were rejected under 35 U.S.C. § 103 as being unpatentable over Rosas in view of Kadner, and further in view of U.S. Patent No. 4,002,318 to Koch. These rejections are respectfully traversed in view of the following comments.

Claim 21 recites a combination of features including “a pin having a first portion at least partially surrounded by the bobbin and adjacent a second portion, a valve seat including an aperture sized to receive the second portion of the pin so as to occlude the aperture, the first portion having a cross-sectional area greater than a cross-sectional area of the second portion, the pin displaceable with respect to the bobbin when an electric current flows through the wire.” It is respectfully submitted that these features are supported by the originally filed specification and drawings. For example, with reference to the originally filed specification at page 3, lines 22-23,

claim 14, and Figure 5, Applicant's pin 5 includes a first portion, e.g., whose displacement is guided by lower bearing 20, and an adjacent second portion, e.g., coupled to the first portion by a shoulder against which seal 16 is positioned. The relative sizes of the second portion and the aperture in the seat 13 are such that, when the second portion is received in the aperture, the second portion occludes the aperture. And the first portion has a cross-sectional area that is relatively greater than the cross-sectional area of the second portion. It is respectfully submitted that the invention as a whole, as recited in independent claim 21, is not taught or suggested by Rosas and Kadner, whether considered individually or in combination.

Rosas states at column 3, lines 45-57, that an armature 60 has a cylindrical body 62 and a concentric nib 64. The nib 64 carries a valve head 16, which is held in place on the nib 64 by a circular rib of the valve head 16 engaging a circular groove in the nib 64. According to Rosas, "[t]he diameter of the nib 64 is substantially less than [sic] the inner diameter of the annular valve seat 22 so that the annular valve seat 22 is engaged by a flexible portion of the valve head 16" (column 3, lines 51-54). As such, the arrangement of Rosas "provides a good seal when the valve head 16 is closed because the valve head 16 flexes and adjusts for any misalignments or irregularities in the valve seat 22" (column 3, lines 54-57).

Thus, in contrast to Applicant's invention, Rosas does not show, for example, that the relative sizes of the nib 64 and the aperture in the annular valve seat 22 are such that, when the nib 64 is received in the aperture, the nib 64 occludes the aperture. In fact, it appears that Rosas's nib 64 is never received in the aperture in the annular valve seat 22, much less occludes the aperture in the annular valve seat 22.

Kadner is cited in the Office Action as allegedly suggesting a reciprocating valve member 3 with an O-ring retainer member 15 of reduced cross-section that occludes a seat 12. Moreover, the Office Action alleges that it would have been obvious for one of ordinary skill in the art to have used such an O-ring retainer member 15 as taught by Kadner in the Rosas valve. These allegations are respectfully traversed, and it is respectfully submitted that Kadner suffers from the same deficiencies as Rosas.

Kadner shows a valve in which "a mechanical as well as an elastomeric seal are formed" (column 3, lines 15-16). Specifically, Kadner's valve member 3 "has a disc-like surface 14 which co-operates with the seat 11 to form a mechanical seal" (column 3, lines 3-5), and an

O-ring 13 that engages a seat 12 to form an elastomeric seal (column 3, lines 10-15). However, like Rosas, Kadner fails to teach or suggest a valve seat including an aperture sized to receive a portion of a pin so as to occlude the aperture, as recited in Applicant's independent claim 21. In fact, Kadner's Figures 1 and 2 clearly show that there is a gap between O-ring retainer member 15 and the seat 12.

Therefore, for at least these reasons, it is respectfully submitted that neither Rosas nor Kadner, whether considered individually or in combination, teach or suggest the claimed invention as a whole, and it is respectfully requested that independent claim 21 be allowed.

Claims 21-24 and 11-13 depend, either directly or indirectly from claim 21, and are also respectfully submitted to be allowable for at least the same reasons as claim 21 and for the additionally recited features that further distinguish over the applied prior art. Thus, allowance of these dependent claims is respectfully requested.

The Office Action apparently relies on Koch to suggest a pin calibration feature that the Office Action acknowledges is absent from Rosas and Kadner. However, it is noted that Koch also fails to overcome the deficiencies of Rosas and Kadner with respect to claim 21. Thus, claims 7-10 and 14-16, which depend either directly or indirectly from independent claim 21, and are also respectfully submitted to be allowable for at least the same reasons as claim 21 and for the additionally recited features that further distinguish over the applied prior art. Thus, allowance of these dependent claims is also respectfully requested.

With regard to the statement in the Office Action that "[s]ince no arguments in traverse of the above rejections have been made, the rejection is maintained," it is respectfully submitted that traversing arguments could not have previously been made inasmuch as these rejections have only just been set forth in the current Office Action.

In view of the foregoing remarks, it is respectfully submitted that the application is in condition for allowance. Moreover, entry of this amendment is earnestly solicited insofar as it does not present any new matter, does not raise any new issues (and addresses only those issues that were newly set forth in the Office Action), does not present any additional claims, and is respectfully submitted to place the application in condition for allowance, or at least in better form for appeal.

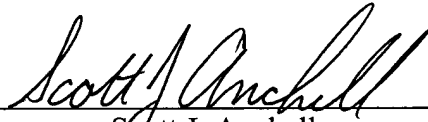
Should the Examiner feel that there are any issues outstanding after consideration of this response, the Examiner is invited to contact the undersigned to expedite prosecution.

EXCEPT for issue fees payable under 37 C.F.R. § 1.18, the Commissioner is hereby authorized by this paper to charge any additional fees during the entire pendency of this application including fees due under 37 C.F.R. §§ 1.16 and 1.17 which may be required, including any required extension of time fees, or credit any overpayment to Deposit Account 50-0310. This paragraph is intended to be a CONSTRUCTIVE PETITION FOR EXTENSION OF TIME in accordance with 37 C.F.R. § 1.136(a)(3).

Attached hereto is a marked up version of the changes made by this amendment. The attached pages are captioned Version with Markings to Show Changes Made.

Respectfully submitted,
MORGAN, LEWIS & BOCKIUS LLP

Date: 21 January 2003

By: 
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